

What is claimed is:

1. A communication network, comprising:
a plurality of intermediaries generating and transmitting a request for
5 information and a response to the request; and
a location token requesting location information corresponding to the first
intermediary and transmitted between the plurality of intermediaries within the
request and the response.
- 10 2. The communication network of claim 1, wherein the location
information is inserted within the location token in response to receipt of the location
token by one or more of the plurality of intermediaries.
- 15 3. The communication network of claim 2, wherein the location token
includes signature codes corresponding to location information inserted within the
location token.
- 20 4. The communication network of claim 1, wherein the location
information is incrementally inserted by one or more of the plurality of
intermediaries.
- 25 5. The communication network of claim 1, the plurality of intermediaries
including a first intermediary and a second intermediary, wherein the plurality of
intermediaries other than the first and the second intermediary are between the first
and the second intermediary, and wherein the location information is inserted in both
directions between the first intermediary and the second intermediary by one or more
of the plurality of intermediaries.
- 30 6. The communication network of claim 1, further comprising a location
command requesting the location information, the location command positioned
within the location token, wherein the location information is inserted within the
location token by one or more of the plurality of intermediaries in response to the
location command.

7. A communication network, comprising:
a first intermediary generating and transmitting a request for information;
a second intermediary generating a first response to the request, the first
response including a first location token requesting location information
5 corresponding to the first intermediary; and
a third intermediary between the first and the second intermediary, wherein the
first response is transmitted between the first intermediary and the second
intermediary through the third intermediary.

10 8. The communication network of claim 7, wherein the first location
token includes a first location command requesting insertion of location information
within the location token by either the first intermediary or by both the first and the
third intermediary.

15 9. The communication network of claim 8, wherein the first intermediary
generates a second location token including location information available to the first
intermediary in response to the first location command, the second location token
including a second location command requesting insertion of location information
within the second location token, and wherein the third intermediary inserts location
20 information available to the third intermediary in response to the second location
command, and the second intermediary generates and transmits a second response to
the first intermediary through the third intermediary, the second response including
the location information inserted within the second location token by the first and the
third intermediary.

25 10. The communication network of claim 9, wherein the second location
token is an update of the first location token

30 11. The communication network of claim 9, wherein the first and the
second location token include signature codes corresponding to the intermediary
inserting location information.

12. The communication network of claim 9, wherein the second intermediary inserts location information available to the second intermediary within the second response.

5 13. The communication network of claim 9, wherein the second intermediary inserts location information available to the second intermediary within the first response.

10 14. The communication network of claim 8, wherein, in response to the first location command, the third intermediary inserts location information available to the third intermediary within the first location token and the first intermediary generates a second location token, including the location information inserted by the third intermediary and location information available to the first intermediary, and wherein the second intermediary generates and transmits a second response to the first
15 intermediary through the third intermediary, the second response including the location information inserted within the updated location token.

20 15. The communication network of claim 14, wherein the first and the second location token include signature codes corresponding to the intermediary inserting location information.

25 16. The communication network of claim 14, wherein the second intermediary inserts location information available to the second intermediary within the second response.

17. The communication network of claim 14, wherein the second intermediary inserts location information available to the second intermediary within the first response.

30 18. The communication network of claim 14, wherein the second location token is an update of the first location token.

19. A communication network, comprising:
a first intermediary generating and transmitting a request for information, the request including a first location token requesting location information corresponding to the first intermediary;

5 a second intermediary generating a response to the request, the response including a second location token; and

a third intermediary, between the first and the second intermediary, transmitting the request and the response between the first and the second intermediary, wherein the first intermediary includes location information available to
10 the first intermediary within the first location token, and the second intermediary includes location information previously inserted within the first location token in the second location token.

20. The communication network of claim 19, wherein the second location
15 token is an update of the first location token.

21. The communication network of claim 19, wherein the third
intermediary inserts location information within second location token as the response is transmitted from the second intermediary to the first intermediary.

22. The communication network of claim 19, wherein the second
intermediary inserts location information available to the second intermediary within the second location token.

23. The communication network of claim 19, wherein the third
25 intermediary inserts location information within the first location token as the request is transmitted from the first intermediary to the second intermediary.

24. The communication network of claim 19, wherein the first and the
30 second location token include signature codes corresponding to the intermediary inserting location information.

25. A method for transferring and collecting location information in a communication network, comprising the steps of:
generating a request for information at a first intermediary;
transmitting the request to a second intermediary through a third intermediary;
5 generating a response to the request for information; and
transmitting a first location token between the first, second and third intermediaries requesting insertion of location information corresponding to the first intermediary.

10 26. The method of claim 25, further comprising the step of inserting signature codes identifying the intermediary inserting the location information.

27. The method of claim 25, wherein the first location token is transmitted within the response and includes a location command requesting insertion of the
15 location information by the first intermediary, the method further comprising the steps of:

transmitting the response to the first intermediary through the third intermediary;

generating a second location token in response to the location command, the
20 second location token including location information available to the first intermediary and a second location command requesting insertion of location information within updated location token;

transmitting the second location token from the first intermediary to a third intermediary;

25 inserting location information available to the third intermediary within the second location token and transmitting the second location token from the third intermediary to the second intermediary; and

generating an updated response to the request for information using the location information inserted by the first and third intermediaries and transmitting the
30 updated response to the first intermediary through the third intermediary.

28. The method of claim 27, wherein the second location token is an update of the first location token.

29. The method of claim 25, wherein the first location token is transmitted within the response and includes a location command requesting insertion of the location information by the first intermediary and the third intermediary, the method further comprising the steps of:

transmitting the response to the third intermediary;

inserting location information available to the third intermediary within the first location token and transmitting the response from the third intermediary to the first intermediary;

generating an updated request including a second location token including location information inserted by the third intermediary along with location information available to the first intermediary;

transmitting the updated request from the first intermediary to the second intermediary through the third intermediary; and

generating an updated response to the request for information using the location information inserted by the first and third intermediaries within the second location token and transmitting the updated response to the first intermediary through the third intermediary.

30. The method of claim 29, wherein the second location token is an update of the first location token.

31. The method of claim 25, wherein the first location token is transmitted within the request, along with location information available to the first intermediary, the method further comprising the steps of:

generating a second location token to be included in the response, the second location token including location information inserted by the first intermediary and location information available to the second intermediary, along with a location command requesting the third intermediary to insert location information within the second location token;

transmitting the response to the third intermediary; and
inserting location information available to the third intermediary within the
second location token and transmitting the response from the third intermediary to the
first intermediary.

5

32. The method of claim 31, wherein the second location token is an
update of the first location token.

33. The method of claim 25, wherein the first location token is transmitted
10 within the request and includes a location command requesting insertion of the
location information by the second and third intermediaries, along with location
information available to the first intermediary, the method further comprising the
steps of:

transmitting the request to the third intermediary;
15 inserting location information available to the third intermediary within the
first location token and transmitting the request from the third intermediary to the
second intermediary;
generating a second location token to be included in the response, the second
location token including location information inserted by the first and third
20 intermediaries and location information available to the second intermediary; and
transmitting the response to the first intermediary through the third
intermediary.

34. The method of claim 33, wherein the second location token is an
25 update of the first location token.

30